

whether the display device supports one or more safe modes that also are supported by the media client **100** (**335**). If the display device can operate in one or more safe modes supported by the media client **100**, the media client **100** can configure the output to correspond to one of the supported safe modes (**340**). For example, the media client **100** can be configured to select the compatible safe mode with the highest possible resolution. Once the media client **100** has been configured to output information to the display device in a compatible safe mode, the display configuration analysis can be terminated (**315**).

[0038] If the media client **100** determines that the display device cannot operate in any of the supported safe modes, the media client **100** further can determine whether the display device can operate in any unsafe modes that are supported by the media client **100** (**345**). If the display device can operate in an unsafe mode supported by the media client **100**, a display configuration process can be executed (**325**). If the display device cannot operate in an unsafe mode supported by the media client **100**, a compatible display mode closest to a default display mode can be selected (**350**). For example, a default display mode can be specified in the media client **100**, such as a resolution of 720p and a timing of 60 Hz. If the media client **100** does not support a display mode that is compatible with a mode supported by the display device, then the media client **100** can select the display mode closest to the default mode that produces visible output on the display device. Once visible output is presented on the display device and confirmed by user input, the display configuration analysis can be terminated (**315**).

[0039] FIG. 4 presents a flowchart for performing a display configuration process. In addition to responding to circumstances detected during a boot or hot plug event, the display configuration process also can be initiated in response to a command received from a user, such as through the selection of an option in a user interface or through one or more commands entered into a remote control device (**405**). In an implementation, a command can be received from a user through another input supported by the media client **100**, including a touch screen, a keyboard, a keypad, a touch pad, a voice command system, and a mouse.

[0040] A media processing device, such as the media client **100**, executing the display configuration process can select a list of one or more primary display modes (**410**). In an implementation, the list of primary display modes can be specified such that only safe modes are included. In another implementation, the list of primary display modes can be selected based on information included in an EDID received from a display device. Thus, one or more display modes not supported by the display device can be omitted from the list of primary display modes. The media client **100** can be configured to cycle through the list of primary display modes sequentially until a supported display mode that is compatible with the display device is identified. Further, a list of display modes also can be ordered based on one or more criteria, such as resolution or how commonly they are supported. For example, the most commonly supported display mode in a list can be ordered first, while the least commonly supported display mode can be ordered last. TABLE 1 presents an exemplary list of display modes.

USER INTERFACE	RESOLUTION	TIMING
720p	1280 × 720	720p60
720p	1280 × 720	720p50
1080i	1920 × 1080	1080i60
1080i	1920 × 1080	1080i50
480p	720 × 480	480p60
480i	720 × 480	480i60
576p	1024 × 576	576p
576i	1024 × 576	576i

[0041] Further, the order in which the media client **100** cycles through a list of display modes can be set based on one or more preferences, such that one or more preferred display modes are attempted before other supported display modes. Thus, if a preferred display mode is compatible with the display device, the preferred display mode can be selected. For example, if the output of the media client **100** is optimized for standard high-definition display modes, the supported standard high-definition display modes can be attempted before other display modes. Similarly, if other high-definition display modes are preferred over standard definition modes, the other high-definition modes can be attempted before any of the standard definition modes. In this manner, the most highly preferred display mode that also is compatible with the display device can be selected.

[0042] The media client **100** generates output to the display device using a selected display mode from the current list of display modes (**415**). The output can include a prompt requesting the user to perform an action, such as entering a command, if the generated output is visible on the display device. The media client **100** can continue to generate output to the display device using the selected display mode for a predetermined period of time if no user input is received. For example, output can be transmitted to the display device using the selected display mode for at least 8 seconds in order to give a user time to respond to a displayed prompt. Additionally, the media client **100** can present audio output to a user. For example, the media client **100** can output a tone to indicate that a new display mode is being attempted. Further, a different tone can be associated with one or more other events, such as completing a traversal of the selected list of display modes or selecting a new list of display modes. During the predetermined period of time, the media client **100** can determine whether input has been received confirming that the generated output is visible on the display device (**420**). If confirming input has been received, the selected display mode can be recorded by the media client **100**, such as in a preference file, and the display configuration process can be terminated (**425**).

[0043] If confirming input is not received during the predetermined period, the media client **100** can determine whether any other display modes remain in the current list of display modes (**430**). If at least one display mode remains, the media client **100** can generate output to the display device using a selected display mode from the current list (**415**). If all of the display modes in the current list of display modes have been attempted, the media client **100** can determine whether a list of alternative display modes is available (**435**). If a list of alternative display modes is available, the list is selected as the current list (**440**). The media client **100** can then generate output to the display device using a selected display mode from the current list (**415**).